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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,018	02/03/2004	Cherif Keramane	U03-0123.63	2017

24239 7590 04/17/2007  
MOORE & VAN ALLEN PLLC  
P.O. BOX 13706  
Research Triangle Park, NC 27709

EXAMINER
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LAROSE, COLIN M

ART UNIT	PAPER NUMBER
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2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/17/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/708,018	KERAMANE, CHERIF	
	<b>Examiner</b>	<b>Art Unit</b>	
	Colin M. LaRose	2624	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/3/05, 3/22/06</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3-5, 7, 9-11, 13, and 15-17 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,593,955 by Falcon.

Regarding claims 1, Falcon discloses a mobile phone (figure 1; column 1/66 et seq.: "a videophone system"; column 3/22-26: the videophone may be a "hand-held device") having a software application for reducing the bitrate of an image to be transmitted by the mobile phone, said mobile phone comprising:

a processor (21);

a processor readable storage medium (22);

code recorded in the processor readable storage medium (35-38) to remove a portion of an original image frame thereby creating dead clusters within the image frame (figure 4, step 72-a: the head and bust of a person in an image is segmented from the background, which is to be removed);

code recorded in the processor readable storage medium (35-38) to fill the dead clusters of the removed portion of the image frame with data to create a new image frame having a

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smaller bitrate than the original image frame (figure 4, step 72-b: the background area is filled with monotonous data, thereby reducing the bitrate of the image); and

code recorded in the processor readable storage medium (35-38) to encode the new image frame such that it requires less bandwidth during transmission than the original image frame would require (column 6/55-59).

Claims 7 and 13 recite the corresponding method and apparatus of claim 1 and are rejected on substantially the same grounds.

Regarding claim 3, Falcon discloses the data used to fill the dead clusters is any solid color, such as white or black (column 7/31-34,44-45).

Claims 9 and 15 recite the corresponding method and apparatus of claim 3 and are rejected on substantially the same grounds.

Regarding claim 4, Falcon discloses code recorded in the processor readable storage medium (35-38) to include a representation of the removed portion of the original image frame with the new image frame during transmission of the new image frame so that it may be utilized by the receiver to improve the presentation of the received image frame by integrating it back into the received image frame (i.e. the monotonous color data substituted for the background is utilized as "a representation" of the removed background portion and is transmitted with the encoded image and utilized by the receiver to reconstruct the image by integrating the monotonous color data with the foreground data).

Claims 10 and 16 recite the corresponding method and apparatus of claim 4 and are rejected on substantially the same grounds.

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Regarding claim 5, Falcon discloses code recorded in the processor readable storage medium (35-38) to automatically determine whether there is a subject centered in the original image frame prior to executing the bitrate reduction software application on the original image frame (figure 3, steps 71-d—71-e); and

code recorded in the processor readable storage medium (35-38) to execute the bitrate reduction software application if the original image is determined to contain a primary object centered in the image frame (column 6/55-59).

Claims 11 and 17 recite the corresponding method and apparatus of claim 5 and are rejected on substantially the same grounds.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 6, 8, 12, 14, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,593,955 by Falcon.

Regarding claims 2, Falcon discloses the data used to fill the dead clusters is any solid color, such as blue or black, but does not expressly disclose white (column 7/31-34,44-45).

However, the use of white would have been obvious to those skilled in the art in view of Falcon's teaching that any monotonous hue can be utilized as the background color.

Claims 8 and 14 recite the corresponding method and apparatus of claim 2 and are rejected on substantially the same grounds.

Regarding claim 6, Falcon does not expressly disclose automatically determining whether there is a subject centered in the original image frame using a contour detection technique applied to the data in the image frame. However, Falcon teaches that the center of a subject's head can be detected "using any one of known face detection algorithms, or other suitable algorithms" (column 6/46-48). Based on this teaching, it would have been obvious to those skilled in the art to utilize any face detection technique that extracts facial contours in order to determine the center of the face.

Claims 12 and 18 recite the corresponding method and apparatus of claim 6 and are rejected on substantially the same grounds.

#### ***Related Prior Art***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

WO 02/085018 A1 by Jang et al.;

U.S. Patent Application Publication 2005/0185045 by Kamariotis; and

U.S. Patent 6,369,848 by Ohkubo.

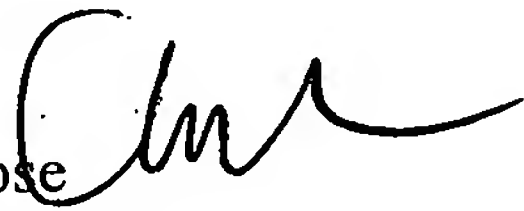
#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colin M. LaRose whose telephone number is (571) 272-7423. If

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attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000. Any inquiry of a general nature or relating to the status of this application or proceeding can also be directed to the TC 2600 Customer Service Office whose telephone number is (571) 272-2600.

  
Colin M. LaRose  
Group Art Unit 2624  
12 April 2007